

attached as Appendix II. None of the amendments to the Claims is intended to narrow the scope of any of the amended Claims within the meaning of *Festo*¹.

CLEAN VERSION OF REWRITTEN, ADDED, AND/OR CANCELLED CLAIMS
PURSUANT TO 37 C.F.R. §1.121 (c)(1)(i)

~~Please cancel Claim 21.~~

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BP
1. (Amended) A gram-positive microorganism having a mutation or deletion of part or all of the gene encoding serine protease 1 (SP1), wherein said gene encoding serine protease 1 comprises SEQ ID NO:1, said mutation or deletion resulting in the inactivation of the SP1 proteolytic activity.

2. (Amended) The gram-positive microorganism according to Claim 1 that is a member of the genus *Bacillus*.

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D
3. (Amended) The microorganism according to Claim 2, wherein the member is selected from the group consisting of *B. licheniformis*, *B. lentus*, *B. brevis*, *B. stearothermophilus*, *B. alkalophilus*, *B. amyloliquefaciens*, *B. coagulans*, *B. circulans*, *B. lautus* and *Bacillus thuringiensis*.

B3
5. (Amended) The microorganism of Claim 4, wherein said heterologous protein is selected from the group consisting of hormones, enzymes, growth factors and cytokines.

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7. (Amended) The microorganism of Claim 6, wherein said enzyme is selected from the group consisting of proteases, carbohydrases, lipases,

¹ *Festo Corp. v. Shoketsu Kogyo Kabushiki Co.*, No. 95-1066, 2000 WL 1753646 (Fed. Cir. Nov. 29, 2000).

B4
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isomerases, racemases, epimerases, tautomerases, mutases, transferases, kinases, and phosphatases.

B5

9. (Twice Amended) An expression vector comprising nucleic acid encoding SP1, wherein said SP1 comprises the nucleic acid sequence set forth in SEQ ID NO:1.

B6

10. (Amended) A host cell comprising an expression vector according to Claim 9.

B7

11. (Twice Amended) A method for the production of a heterologous protein in a *Bacillus* host cell comprising the steps of
(a) obtaining a *Bacillus* host cell comprising nucleic acid encoding said heterologous protein wherein said host cell contains a mutation or deletion in the gene encoding serine protease 1, wherein said serine protease 1 comprises the nucleic acid sequence set forth in SEQ ID NO:1;
(b) growing said *Bacillus* host cell under conditions suitable for the expression of said heterologous protein.

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B8

18. (Amended) The method of Claim 17 wherein said *Bacillus* host cell further comprises a mutation or deletion in at least one of the genes encoding apr, npr, epr, wpr and mrp.

19. (Amended) A gram-positive microorganism having at mutation or deletion in the gene encoding serine protease 1, wherein said serine protease 1 is encoded by the nucleic acid set forth in SEQ ID NO:1.

APPENDIX II

CLEAN VERSION OF THE ENTIRE SET OF PENDING CLAIMS AS AMENDED IN THIS COMMUNICATION

The following is a list of the Claims as they would appear following entry of this amendment.

1. (Amended) A gram-positive microorganism having a mutation or deletion of part or all of the gene encoding serine protease 1 (SP1), wherein said gene encoding serine protease 1 comprises SEQ ID NO:1, said mutation or deletion resulting in the inactivation of the SP1 proteolytic activity.
2. (Amended) The gram-positive microorganism according to Claim 1 that is a member of the genus *Bacillus*.
3. (Amended) The microorganism according to Claim 2, wherein the member is selected from the group consisting of *B. licheniformis*, *B. lentus*, *B. brevis*, *B. stearothermophilus*, *B. alkalophilus*, *B. amyloliquefaciens*, *B. coagulans*, *B. circulans*, *B. lautus* and *Bacillus thuringiensis*.
4. The microorganism of Claim 1 wherein said microorganism is capable of expressing a heterologous protein.
5. (Amended) The microorganism of Claim 4, wherein said heterologous protein is selected from the group consisting of hormones, enzymes, growth factors and cytokines.
6. The microorganism of Claim 5 wherein said heterologous protein is an enzyme.

7. (Amended) The microorganism of Claim 6, wherein said enzyme is selected from the group consisting of proteases, carbohydrases, lipases, isomerasers, racemases, epimerases, tautomerases, mutases, transferases, kinases, and phosphatases.

9. (Twice Amended) An expression vector comprising nucleic acid encoding SP1, wherein said SP1 comprises the nucleic acid sequence set forth in SEQ ID NO:1.

10. (Amended) A host cell comprising an expression vector according to Claim 9.

11. (Twice Amended) A method for the production of a heterologous protein in a *Bacillus* host cell comprising the steps of

(a) obtaining a *Bacillus* host cell comprising nucleic acid encoding said heterologous protein wherein said host cell contains a mutation or deletion in the gene encoding serine protease 1, wherein said serine protease 1 comprises the nucleic acid sequence set forth in SEQ ID NO:1;

(b) growing said *Bacillus* host cell under conditions suitable for the expression of said heterologous protein.

12. The method of Claim 11 wherein said *Bacillus* cell is selected from the group consisting of *Bacillus subtilis*, *B. licheniformis*, *B. lentus*, *B. brevis*, *B. stearothermophilus*, *B. alkalophilus*, *B. amyloliquefaciens*, *B. coagulans*, *B. circulans*, *B. lautus* and *Bacillus thuringiensis*.

13. (Amended) The method of Claim 12 wherein said *Bacillus* host cell further comprises a mutation or deletion in at least one of the genes encoding apr, npr, epr, wpr and mrp.

14. (Amended) A gram-positive microorganism having a mutation or deletion in the gene encoding serine protease 1, wherein said serine protease 1 is encoded by the nucleic acid set forth in SEQ ID NO:1.

19 20. The microorganism of Claim 19 further comprising a mutation or
deletion in at least one of the genes encoding apr, npr, epr, wpr and mrp.